

\* SWBAT explain how temperature relates to size and molecule motion

Sep 6-2:31 PM

# Welcome!!!

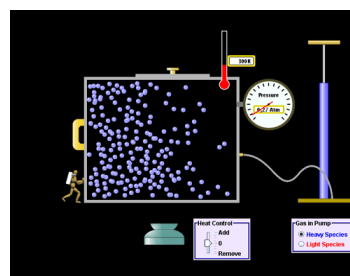
H. Leslie Grebe

WBL ALC Physics  
Thursday 17 December 2015

- \* Sign in
- \* Pick up:
  - worksheet
  - yesterday's worksheet (if you weren't here)
  - slip of paper (for later)

Centering...

Opening question + Yesterday's Worksheet  
Remember our box of molecules? What happens if we leave the ice / cooling on?



Sep 7-7:04 AM

Heat is... **KINETIC ENERGY OF MOLECULE MOTION**

Molecules are... **LITTLEST BITS**

Temperature is... **AVERAGE KINETIC ENERGY**

How do we get thermometer scales?

TUBE IN FREEZING WATER  
& MARK LIQUID HEIGHT

MR. FAHRENHEIT =  $32^{\circ}\text{F}$

MR. CELSIUS =  $0^{\circ}\text{C}$

ASHLEY SCALE =  $7^{\circ}\text{A}$

COMPLETELY ARBITRARY



**KELVIN SAME SIZE DEGREE AS  $^{\circ}\text{C}$   
BUT 0 MEANS ZERO TEMP.**

Worksheet

Demo at back of room

Dec 21-7:28 AM

#### Eureka 20: Measuring Temperature

What did we find out?

<http://www.youtube.com/watch?v=nCQVTKu0Xc>

**Demo: 1 hand in cold water**

**1 hand in hot water**

**Both into middle bowl, but feel  
different temperatures!!!**

**→ Hands / Brain are good at  
detecting DIFFERENCES,  
Good at comparing**

Is it  $60^{\circ}$ ?  $70^{\circ}$ ?  $80^{\circ}$ ?

**→ Hands not reliable for  
for determining actual  
temperature**

Dec 14-7:13 AM

### Daily 3 Questions

- \* Every day except test/project days
- \* 3 Questions on the topics of the day
- \* Main source of daily points
- \* I am happy to give credit when I have no concerns about someone giving or getting help with the answers.

You can't get your points if you don't have your **NAME!!!**

Name	Period
1.	
2.	
3.	

Sep 9-7:32 AM

1. Water freezes at  
A. 0 degrees Celsius      B. 32 degrees Fahrenheit  
C. Both      D. Neither
2. In which temperature scale does zero really mean the coldest something could get?  
A. Kelvin  
B. Fahrenheit  
C. Celsius
3. True or false: Your hands are a consistent and reliable way to judge temperature (# of degrees).

Dec 2-7:55 AM